FSA Modernization Partner

NSLDS II Reengineering
System Interface Detail Design:
Postsecondary Education Participant System
School Cohort Default Rate Interface
I-PEPS-2

Version 2.0

November 8, 2002

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Document Control

Version Number	Description	Release Date	Author
1.0	Initial Issue	11/08/2002	Troy Edwards

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1 Postsecondary Education Participant System (PEPS)

PEPS will send school-related data to NSLDS II daily. The data sent by PEPS will be the primary source of school data for NSLDS II. NSLDS II will also use this data to calculate the Cohort Default Rate for each School, GA, and Lender (currently done twice a year). After calculation of cohort default rates, NSLDS II will send calculated rates to PEPS.

The PEPS interfaces include:
- PEPS Extract File – School Data (**See I-PEPS-1 Document**)
- Error File (PEPS Extract File) (**See I-PEPS-1 Document**)
- School Cohort Default Rate File (**Section 1.2**)
- GA/Lender Cohort Default Rate (**See I-PEPS-3 Document**)

1.1 System Specifics

1.1.1 NSLDS II

Item	Description
Production Platform *(Vendor/Product Name/Version)*	IBM/ Cluster 1600 Server/ 4 p-Series 660 Model 6M1 4 FastT500 Arrays
Operating System *(Vendor/Product Name/Version)*	Unix/AIX/V 5.1 Parallel Systems Support Program (PSSP)
DBMS *(Vendor/Product Name/Version)*	IBM/DB2 Universal Database (UDB)/Enterprise Extended v. 7.2
Transmission Protocol	TCP/IP
Production System IP Address	TBD
Production System Location	Meriden, CT
Contracting Organization	Accenture – Modernization Partner
Developer Location	Modernization Partner Offices – Washington DC

1.1.2 PEPS

Item	Description
Production Platform *(Vendor/Product Name/Version)*	HP / HP 9000
Operating System *(Vendor/Product Name/Version)*	Unix

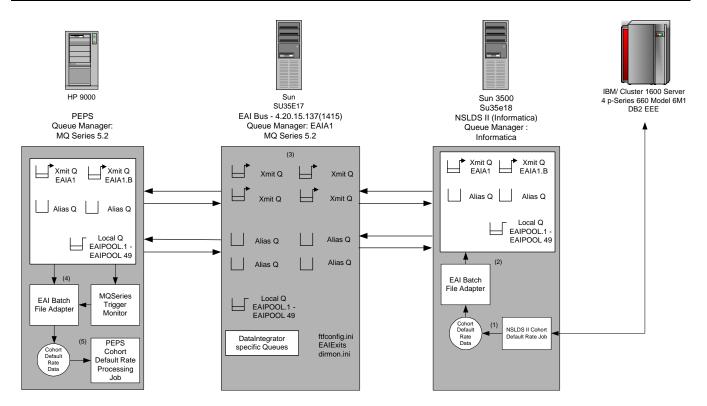| DBMS *(Vendor/Product Name/Version)*	Oracle 8i/8.05
Transmission Protocol	TCP/IP
Production System IP Address	4.20.2.130
Production System Location	Meriden, CT (VDC)
Contracting Organization	CBMI
Developer Location	Fairfax, VA

1.2   School Cohort Default Rate

1.2.1   Interface Control Specifications

Interface Name:	School Cohort Default Rate
Interface Type/Direction:	Unidirectional, Batch Type
Interface Short Description:	This document defines the processes utilized by NSLDS II to transport the School Cohort Default Rate file (Draft and Official) to PEPS via the EAI BUS. NSLDS II will calculate draft and official Cohort Default Rates. See the Cohort Default Rate procedure document (P-CDR-1) for additional details. After calculation of Cohort Default Rates, NSLDS II (Informatica) will produce a file in flat file format and transmit the file to PEPS over the EAI BUS.
Requesting Application: or Source Application:	NSLDS II is the source of the School CDR file
Responding Application: or Destination Application:	PEPS receives the School CDR file
Detailed Technical Requirement References:	5.044, 5.045
Interface Usage Frequency:	Bi-Annually (One file containing Draft rates in February and one file containing Official rates in September)
Interface Usage Volume:	35,000 records average
Output Media:	Flat File in EBCDIC Format
Transmission Mechanism:	EAI Bus

1.2.2   Interface Flow

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1.2.3 Interface Flow Description

1. NSLDS II (Informatica) will initiate a process to create the School Cohort Default Rate File
2. The EAI Batch File Adapter will move the file to the EAI BUS
3. The EAI BUS will route the file to the PEPS server
4. The EAI Batch File Adapter will move the file to the PEPS server
5. The PEPS data job will process the School Cohort Default Rate file

1.2.4 Source System Functional Specifications

#	Responsibility
1	NSLDS II (Informatica) will extract the School Data and save it as a flat file
2	The data extracted will be laid out as in section 1.2.8 Each record will consist of: One Detail Record
3	File data elements are defined as character, numeric, or date fields, where: • Character fields may contain letters, numbers, or blanks. • Numeric fields must only contain numbers. • Date fields must contain eight digits, be valid dates, and appear in the format CCYYMMDD (e.g., 19970131), where:

	− CC = 2 digits for century
	− YY = 2 digits for year
	− MM = 2 digits for month
	− DD = 2 digits for day
	The following default values are used in the following types of fields: • Character fields—must be filled with spaces. • Numeric fields—must be filled with zeroes. • Date fields—must be filled with zeroes.
4	An EAI batch file adapter will be supplied to initiate the file transfer from NSLDS II to PEPS
5	NSLDS II will provide the EAI adaptor file transfer utility with the following input parameters: Input File Name - TBD

1.2.5 Destination System Functional Specifications

#	Responsibility
1	The EAI BUS will deliver the School Cohort Default Rate file to the PEPS server
2	The EAI Adaptor takes the following information as input: Queue manager name - TBD Queue name - TBD Sync point counter - TBD Output file name - TBD
3	The MQ Series Trigger Monitor may trigger the PEPS Cohort Default Data processing job

1.2.6 Interface Assumptions

#	Assumption
1	MQ Series Queue Manager is installed / configured for the NSLDS II / PEPS environment
2	The EAI architecture will be configured to support the transfer of data from NSLDS II to PEPS
3	Detailed Cohort Default Rate functionality is outlined in the Cohort Default Rate Procedures document (P-CDR-1)

1.2.7 Error Messages

Code	Message
NA	NA

1.2.8   File Layout

Main Detail Record Layout

Data Element	Field Position	Length	Type	Description	Edits	Mapping
ID Number	1-6	6	Character	Unique School OPEID	NA	SCH / CODE
ID Number Branch	7-10	4	Character	Branch id for school	NA	SCH_BR / CODE
Entity Type	11-11	1	Character	Organization	Always "S" for school	NA
Cohort Year	12-15	4	Numeric	Twelve month Repayment period for loans used in the calculation	NA	DEFAULT_RATE _HISTORY / COHORT_YEAR
Rate	16-19	4	Numeric (one decimal place)	Students in default divided by students in repayment	Rounded to the first decimal.	Derived – by dividing official numerator and denominator in DEFAULT_RATE _HISTORY
Rate Type	20-20	1	Character	A=Annual or Official D=Draft	NA	DEFAULT_RATE _HISTORY / RATE_TYPE
Rate Sub Type	21-21	1	Character	A=Actual B=Average P=Lead Combo C=True Combo S=Substitution	NA	DEFAULT_RATE _HISTORY / RATE_SUB_TYP E

Data Element	Field Position	Length	Type	Description	Edits	Mapping
Calculation Reason	22-81	60	Character	Text Description of Calculation ("Draft" or "Annual")	NA	DEFAULT_RATE _HISTORY / RATE_TYPE
Official Rate Indicator	82-82	1	Character	Always "O"	NA	DEFAULT_RATE _HISTORY / OFFICIAL_RATE _INDICATOR
FFEL Numerator	83-90	8	Numeric	Count of students with FFEL loans in default	NA	DEFAULT_RATE _HISTORY / FFEL_NUMERA TOR
FFEL Denominator	91-98	8	Numeric	Count of students with FFEL loans in repayment	NA	DEFAULT_RATE _HISTORY / FFEL_DENOMI NATOR
FFEL Dollars in Default	99-108	10	Numeric	Outstanding principal balance of loans for students in FFEL numerator	NA	DEFAULT_RATE _HISTORY / FFEL_DOLLARS _IN_DEFAULT
FFEL Dollars in Repayment	109-118	10	Numeric	Outstanding principal balance of loans for students in FFEL denominator	NA	DEFAULT_RATE _HISTORY / FFEL_DOLLARS IN_REPAYMEN T
Loan Program	119-128	10	Character	FFEL, DIRECT or DUAL	"DUAL" if DUAL_DENOMINATOR > 0, "FFEL" if FFEL_DENOMINATOR > 0 AND DUAL = 0 , ELSE "DIRECT"	Derived - based on Denominator values in DEFAULT_RATE _HISTORY

Data Element	Field Position	Length	Type	Description	Edits	Mapping
Run Timestamp	129-148	20	Character	Date and time of the calculation	NA	DEFAULT_RATE _HISTORY / RUN_STAMP
Lender Type	149-149	1	Character	Not used	Space Default	NA
Originating Date	150-157	8	Numeric	Not Used	Zero Default	NA
System Date	158-165	8	Numeric	Not Used	Zero Default	NA
Media Type	166-173	8	Character	Not Used	Space Default	NA
Sub School ID Num	174-179	6	Character	Source SCHOOL for two schools in a substitution relationship. The Data Element "ID number" above is the target school.	Resolved by reading the involuted relationship for a substitution record (rate_sub_type = "S") in DEFAULT_RATE_HISTORY	SCH / CODE
Sub SCHBR ID Num	180-183	4	Character	Source SCHOOL_BRANCH for two schools in a substitution relationship. The Data Element "ID number branch" above is the target school branch.	NA	SCH_BR / CODE
Direct Numerator	184-191	8	Numeric	Count of students with DIRECT loans in default	NA	DEFAULT_RATE _HISTORY / DIRECT_NUME RATOR

Data Element	Field Position	Length	Type	Description	Edits	Mapping
Direct Denominator	192-199	8	Numeric	Count of students with DIRECT loans in repayment	NA	DEFAULT_RATE_HISTORY / DIRECT_DENOMINATOR
Direct Dollars In Default	200-209	10	Numeric	Outstanding principal balance of loans for students in DIRECT numerator	NA	DEFAULT_RATE_HISTORY / DIRECT_DOLLARS_IN_DEFAULT
Direct Dollars In Repayment	210-219	10	Numeric	Outstanding principal balance of loans for students in DIRECT numerator	NA	DEFAULT_RATE_HISTORY / DIRECT_DOLLARS_IN_REPAYMENT
Dual Numerator	220-227	8	Numeric	Unduplicated count of students with FFEL and/or DIRECT loans in default	NA	DEFAULT_RATE_HISTORY / DUAL_NUMERATOR
Dual Denominator	228-235	8	Numeric	Unduplicated count of students with FFEL and/or DIRECT loans in repayment	NA	DEFAULT_RATE_HISTORY / DUAL_DENOMINATOR
Dual Dollars in Default	236-245	10	Numeric	Outstanding principal balance of loans for students in DUAL numerator	NA	DEFAULT_RATE_HISTORY / DUAL_DOLLARS_IN_DEFAULT

Data Element	Field Position	Length	Type	Description	Edits	Mapping
Dual Dollars in Repayment	246-255	10	Numeric	Outstanding principal balance of loans for students in DUAL Denominator	NA	DEFAULT_RATE_HISTORY / DUAL_DOLLARS_IN_REPAYMENT
ICR Count	256-263	8	Numeric	No longer applicable	NA	NA
Filler	264-280	17	Character	Reserved for future use	NA	NA